

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

MILLER et al.

Application No.: 10/587,723

International Appl. No. PCT/US2005/003245

International Filing Date: February 3, 2005

Title: METHODS AND COMPOSITIONS FOR
TARGETED CLEAVAGE AND RECOMBINATION

Examiner:

Group Art Unit:

Confirmation No.: 2253

Customer No.: 20855

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.97(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

In accordance with the duty of disclosure set forth in 37 C.F.R. §1.56,
Applicant(s) hereby submits the following information in conformance with 37 C.F.R.
§§1.97 and 1.98.

- ☐ Pursuant to 37 C.F.R. §1.98, copies of publication _____ cited in the attached Form PTO/SB/08 are enclosed.
- ☒ No copies of the U.S. publications A1-A35 listed on the attached Form PTO/SB/08A are being provided because the Office waives the requirement under 37 C.F.R. 1.98 (a) (2) (i) for submitting a copy of each cited U.S. patent and each U. S. patent application publication for all U.S. national patent applications filed after June 30, 2003.
- ☒ No copies of the publications B1-B20 and C1-C102 on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in

prior Application Serial No. 10/912,932 to which the above-identified application claims priority under 35 U.S.C. §120.

- ☐ Publication(s) _____ listed on the attached Form PTO/SB/08A were cited in a foreign search or examination report corresponding to PCT application serial no. _____ and mailed on _____.
- ☐ Enclosed is a copy of a non-English publication(s) _____. Pursuant to §609 of the M.P.E.P., Applicant submits the attached foreign search or examination report, which cites such non-English language publication(s).
- ☐ Enclosed is a copy of a non-English publication(s) _____. English language publication ____ (copy enclosed) claims priority from this non-English publication.
- ☐ Enclosed is an explanation of non-English publication(s) ____ for which an English translation is not available.
- ☐ Enclosed is an English translation of non-English publication(s) ____ cited in the attached Form PTO/SB/08A.
- ☐ Enclosed is a copy of pending patent Application Serial No. _____.

This Information Disclosure Statement is filed within any one of the following time periods:


- ☐ within three months from the filing date of this national application other than a CPA under 37 C.F.R. § 1.53(d);
- ☐ within three months from the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in this international application;
- ☒ before the mailing date of a first office action on the merits; or
- ☐ before the mailing of a first office action after the filing of a request for continued examination under 37 C.F.R. §1.114.

This Information Disclosure Statement under 37 CFR § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

It is respectfully requested that the Examiner consider the above-noted information and return an initialed copy of the attached Form PTO/SB/08A to the undersigned.

Respectfully submitted,

Date: April 25, 2007

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PTO/SB/08A (08-00)

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/587,723
				Filing Date	February 3, 2005
				First Named Inventor	MILLER et al.
				Group Art Unit	
Examiner Name					
Sheet	2	of	10	Attorney Docket Number	8325-0036.31 (S36-US3)

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³	Number ⁴	Kind Code		
	B1	WO	95/09233		Johns Hopkins University	04-06-1995
	B2	WO	96/40882		Ohio State University	12-19-1996
	B3	WO	97/47758		MIT, Einstein Coll. Med.	12-18-1997
	B4	WO	98/53058		Med. Res. Council	11-26-1998
	B5	WO	98/53059		Med. Res. Council	11-26-1998
	B6	WO	98/53060		Med. Res. Council	11-26-1998
	B7	WO	00/09755		Pangene Corporation	02-24-2000
	B8	WO	00/28008		Maxygen, Inc.	05-18-2000
	B9	WO	00/42219		Sangamo BioSciences, Inc.	07-20-2000
	B10	WO	00/46385		Child. Med. Cntr	08-10-2000
	B11	WO	00/46386		Child. Med. Cntr	08-10-2000
	B12	WO	00/63365		Pangene Corporation	10-26-2000
	B13	WO	01/05961		Clontech Lab Inc.	01-25-2001
	B14	WO	01/19981		Sangamo BioSciences, Inc.	03-22-2001
	B15	WO	01/40798		Sangamo BioSciences, Inc.	06-07-2001
	B16	WO	01/66717		University of Utah	09-13-2001
	B17	WO	02/04488		Sangamo BioSciences, Inc.	01-17-2002
	B18	WO	03/080809		Stell	10-02-2003
	B19	WO	03/087341		Univ. of Utah	10-23-2003
	B20	EP	0 957 165		Roche	11-17-1999

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	C1	Aggarwal, et al., "Novel Site-Specific DNA Endonucleases," <i>Current Opinion in Structural Biology</i> 8:19-25 (1998)	
	C2	Abremski, et al., "Bacteriophage P1 Site Specific Recombination," <i>J. Biol. Chem.</i> 259:1509-1514 (1984)	
	C3	Akopian, et al., "Chimeric Recombinases with Designed DNA Sequence Recognition," <i>Proc. Natl. Acad. Sci. USA</i> 100:8688-8691 (2003)	
	C4	Baubonis, et al., "Genomic Targeting with Purified Cre Recombinase," <i>Nucleic Acids Res.</i> 21:2025-2029 (1993)	

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³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

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C5	Beerli, <i>et al.</i> , "Engineering Polydactyl Zinc-Finger Transcription Factors," <i>Nature Biotechnology</i> <u>20</u> :135-141 (2000)	
C6	Bibikova, <i>et al.</i> , "Stimulation of Homologous Recombination through Targeted Cleavage by Chimeric Nucleases," <i>Molecular and Cellular Biology</i> <u>21</u> (1):289-297 (2001)	
C7	Bibikova, <i>et al.</i> , "Targeted Chromosomal Cleavage and Mutagenesis in Drosophila Using Zinc-Finger Nucleases," <i>Genetics</i> <u>161</u> :1169-1175 (2002)	
C8	Bibikova, <i>et al.</i> , "Enhancing Gene Targeting with Designed Zinc Finger Nucleases," <i>Science</i> <u>300</u> :764 (2003) INCLUDING SUPPORTING ONLINE MATERIALS	
C9	Bitiniat, <i>et al.</i> , "FokI Dimerization is Required for DNA Cleavage," <i>Proc. Natl. Acad. Sci.</i> <u>95</u> :10570-10575 (1998)	
C10	Brenneman, <i>et al.</i> , "Stimulation of Intrachromosomal Homologous Recombination in Human Cells by Electroporation with Site Specific Endonucleases," <i>Proc. Natl. Acad. Sci.</i> <u>93</u> :3608-3612 (1996)	
C11	Brisson, <i>et al.</i> , "Expression of a Bacterial Gene in Plants by Using a Viral Vector," <i>Nature</i> <u>310</u> :511-514 (1984)	
C12	Brogie, <i>et al.</i> , "Light Regulated Expression of a Pea Ribulose-1, 5-Biphosphate Carboxylase Small Subunit Gene in Transformed Plant Cells," <i>Science</i> <u>224</u> :838-843 (1984)	
C13	Campbell, <i>et al.</i> , "Sheep Cloned by Nuclear Transfer from a Cultured Cell Line," <i>Nature</i> <u>380</u> :64-66 (1996)	
C14	Cappechi, <i>et al.</i> , "Altering the Genome by Homologous Recombination," <i>Science</i> <u>244</u> :1288-1292 (1989)	
C15	Chandrasegaran, <i>et al.</i> , "Chimeric Restriction Enzymes: What is Next?" <i>Biol Chem.</i> <u>380</u> :841-848 (1999)	
C16	Chevalier, <i>et al.</i> , "Design, Activity, and Structure of a Highly Specific Artificial Endonuclease," <i>Molecular Cell</i> <u>10</u> :895-905 (2002)	
C17	Chouluka, <i>et al.</i> , "Induction of Homologous Recombination in Mammalian Chromosomes by using the I-SceI System of <i>Saccharomyces cerevisiae</i> ," <i>Molecular and Cellular Biology</i> <u>15</u> (4):1968-1973 (1995)	

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	C18	Cohen-Tannoudji, <i>et al.</i> , "I-SceI-Induced Gene Replacement at a Natural Locus in Embryonic Stem Cells," <i>Molecular and Cellular Biology</i> 18 (3):1444-1448 (1998)	
	C19	Corrucci, <i>et al.</i> , "Tissue Specific and Light-Regulated Expression of a Pea Nuclear Gene Encoding the Small Subunit of Ribulose-1, 5-Biphosphate Carboxylase," <i>Embo. J.</i> 3 :1671-1679 (1984)	
	C20	Desjarlais, <i>et al.</i> , "Use of a Zinc-Finger Consensus Sequence Framework and Specificity Rules to Design Specific DNA Binding Proteins," <i>Proc. Natl. Acad. Sci. USA</i> 90 :2256-2260 (1993)	
	C21	Desjarlais, <i>et al.</i> , "Towards Rules Relating Zinc Finger Protein Sequences and DNA Binding Site Preferences," <i>Proc. Natl. Acad. Sci. USA</i> 89 :7345-7349 (1992)	
	C22	Donoho, <i>et al.</i> , "Analysis of Gene targeting and Intrachromosomal Homologous Recombination Stimulated by Genomic Double-Strand Breaks in Mouse Embryonic Stem Cells," <i>Molecular and Cellular Biology</i> 18 (7):4070-4078 (1998)	
	C23	Dreier, <i>et al.</i> , "Development of Zinc Finger Domains for Recognition of the 5'-Ann-3' Family of DNA Sequences and Their Use in the Construction of Artificial Transcription Factors," <i>J. Biol. Chem.</i> 276 (31):29466-29478 (2001)	
	C24	Edelstein, <i>et al.</i> , "Gene therapy clinical trials worldwide 1989-2004-an overview," <i>J. Gene Med.</i> 6 :597-602 (2004)	
	C25	Elliot, <i>et al.</i> , "Gene Conversion Tracts from Double Strand Break Repair in Mammalian Cells," <i>Molecular and Cellular Biology</i> 18 (1):93-101 (1998)	
	C26	Elrod-Erickson, <i>et al.</i> , "Binding Studies with Mutants of Zif268," <i>J. Biol. Chem.</i> 274 (27):19281-19285 (1999)	
	C27	Evans, <i>et al.</i> , Establishment in Culture of Pluripotential Cells from Mouse Embryos," <i>Nature</i> 292 :154-156 (1981)	
	C28	Ferguson-Smith, "Imprinting and the Epigenetic Asymmetry Between Parental Genomes," <i>Science</i> 293 :1086-1089 (2001)	
	C29	Gorlich, <i>et al.</i> , "Nucleocytoplasmic Transport." <i>Science</i> 271 :1513-1518 (1996)	
	C30	Greisman, <i>et al.</i> , "A General Strategy for Selecting High-Affinity Zinc Finger Proteins for Diverse DNA Target Sites," <i>Science</i> 275 :657-661 (1997)	

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	C31	Gowda, <i>et al.</i> , "Identification of Promoter Sequences for the Major RNA Transcripts of Figwort Mosaic and Peanut Chlorotic Streak Virus (Caulimovirus Group)," <i>J. Cell. Biochem.</i> <u>13D</u> :301 (1989)	
	C32	Gu, <i>et al.</i> , "Independent Control of Immunoglobulin Switch Recombination at Individual Switch Regions Evidenced through Cre-loxP-Mediated Gene Targeting," <i>Cell</i> <u>73</u> :1155-1164 (1993)	
	C33	Gu, <i>et al.</i> , "Deletion of a DNA Polymerase B Gene Segment in T Cells Using Cell Type-Specific Gene Targeting," <i>Science</i> <u>265</u> :103-106 (1994)	
	C34	Gurley, <i>et al.</i> , "Upstream Sequences Required for Efficient Expression of a Soybean Heat Shock Gene," <i>Mol. Cell. Biol.</i> <u>6</u> :559-565 (1986)	
	C35	Hanson, <i>et al.</i> , "Analysis of Biological Selections for High-Efficiency Gene Targeting," <i>Mol. Cell. Biol.</i> <u>15</u> :45-51 (1995)	
	C36	Hicks, <i>et al.</i> , "Three Classes of Nuclear Import Signals Bind to Plant Nuclei," <i>Plant Physiol.</i> <u>107</u> :1055-1058 (1995)	
	C37	Huang, <i>et al.</i> , "Splase: A New Class IIS Zinc-Finger Restriction Endonuclease with Specificity for Sp1 Binding Sites," <i>Journal of Protein Chemistry</i> <u>15</u> (5):481-489 (1996)	
	C38	Jallepalli, <i>et al.</i> , "Securin is Required for Chromosomal Stability in Human Cells," <i>Cell</i> <u>105</u> :445-457 (2001)	
	C39	Jaenisch, "Transgenic Animals," <i>Science</i> <u>240</u> :1468-1474 (1988)	
	C40	Jasin, "Genetic Manipulation of Genomes with Rare-Cutting Endonucleases," <i>Trends Genet.</i> <u>12</u> :224-228 (1996)	
	C41	Jeggo, <i>et al.</i> , "Identification of Genes Involved in Repair of Dna Double-Strand Breaks in Mammalian Cells," <i>Radiation Research</i> <u>150</u> :S80-S91 (1998)	
	C42	Johnson, <i>et al.</i> , "Double-Strand-Break-Induced Homologous Recombination in Mammalian Cells," <i>Biochemical Society Transactions</i> <u>29</u> :196-201 (2001)	
	C43	Khanna, <i>et al.</i> , "DNA Double-Strand Breaks: Signaling, Repair and the Cancer Connection," <i>Nature Genetics</i> <u>27</u> :247-254 (2001)	

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	C44	Kim, <i>et al.</i> , "Construction of a Z-Dna-Specific Restriction Endonuclease," <i>Proc. Natl. Acad. Sci. USA</i> <u>94</u> :12875-12879 (1997)	
	C45	Kim, <i>et al.</i> , "Hybrid Restriction Enzymes: Zinc Finger Fusions of FokI Cleavage Domain." <i>Proc. Natl. Acad. Sci. USA</i> <u>93</u> :1156-1160 (1996)	
	C46	Kim, <i>et al.</i> , "Chimeric Restriction Endonuclease," <i>Proc. Natl. Acad. Sci. USA</i> <u>91</u> :883-887 (1994)	
	C47	Kim, <i>et al.</i> , "Chimeric Restriction Enzyme: Gal4 Fusion to FokI Cleavage Domain," <i>Biol. Chem.</i> <u>379</u> :489-495 (1998)	
	C48	Kim, <i>et al.</i> , "Insertion and Deletion of Mutants of FokI Restriction Endonuclease," <i>Journal of Biol. Chem.</i> <u>269</u> (50):31978-31982 (1994)	
	C49	Klein, <i>et al.</i> , "Transformation of Microbes, Plants and Animals by Particle Bombardment," <i>Bio/Techniques</i> <u>10</u> :286-291 (1992)	
	C50	Klein, <i>et al.</i> , "High-Velocity Microprojectiles for Delivering Nucleic Acids into Living Cells," <i>Nature</i> <u>327</u> :70-73 (1987)	
	C51	Kuehn, <i>et al.</i> , "A Potential Animal Model for Lesch-Nyhan Syndrome Through Introduction of HPRT Mutations into Mice," <i>Nature</i> <u>326</u> :295-298 (1987)	
	C52	Lai, <i>et al.</i> , Production of a-1,3-Galctosyltransferase Knockout Pigs by Nuclear Transfer Cloning," <i>Science</i> <u>295</u> :1089-1092 (2002)	
	C53	Li, <i>et al.</i> , "Alteration of the Cleavage Distance of FokI Restriction Endonuclease by Insertion Mutagenesis," <i>Proc. Natl. Acad. Sci. USA</i> <u>90</u> :2764-2768 (1993)	
	C54	Li, <i>et al.</i> , "Functional Domains in FokI Restriction Endonuclease," <i>Proc. Natl. Acad. Sci. USA</i> <u>89</u> :4275-4279 (1992)	
	C55	Liu, <i>et al.</i> , "Validated Zinc Finger Protein Designs for All 16 GNN DNA Triplet Targets," <i>J. Biol. Chem.</i> <u>277</u> (6):3850-3856 (2002)	
	C56	Luo, <i>et al.</i> , "Synthetic DNA delivery systems," <i>Nature Biotechnology</i> <u>18</u> :33-37 (2000)	

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	C57	Mattaj, <i>et al.</i> , "Nucleocytoplasmic Transport: The Soluble Phase," <i>Annu. Rev. Biochem.</i> <u>67</u> :265-306 (1998)	
	C58	McCreath, <i>et al.</i> , "Production of Gene-Targeted Sheep by Nuclear Transfer from Cultured Somatic Cells," <i>Nature</i> <u>405</u> :1066-1069 (2000)	
	C59	Nahon, <i>et al.</i> , "Targeting a Truncated Ho-Endonuclease of Yeast to Novel DNA Sites with Foreign Zinc Fingers," <i>Nucleic Acids Research</i> <u>26</u> (5):1233-1239 (1998)	
	C60	Odell, <i>et al.</i> , "Identification of DNA Sequences Required for Activity of the Cauliflower Mosaic Virus 35S Promoter," <i>Nature</i> <u>313</u> :810-812 (1985)	
	C61	Pabo, <i>et al.</i> , "Design and Selection of Novel Cys2his2 Zinc Finger Proteins," <i>Annu. Rev. Biochem.</i> <u>70</u> :313-340 (2001)	
	C62	Palu, <i>et al.</i> , "In pursuit of new developments for gene therapy of human diseases," <i>J. Biotechnol</i> <u>68</u> :1-13 (1999)	
	C63	Porteus, <i>et al.</i> , "Efficient Gene Targeting Mediated by Adeno-Associated Virus and DNA Double-Strand Breaks," <i>Mol. Cell. Biol.</i> <u>23</u> :3558-3565 (2003)	
	C64	Porteus, <i>et al.</i> , "Chimeric Nucleases Stimulate Gene Targeting in Human Cells," <i>Science</i> <u>300</u> :763 (2003) INCLUDING SUPPORTING ONLINE MATERIALS	
	C65	Puchta, <i>et al.</i> , "Homologous Recombination in Plant Cells is Enhanced by In Vivo Induction of Double Strand Breaks into DNA by a Site-Specific Endonuclease," <i>Nucleic Acids Res.</i> <u>21</u> :5034-5040 (1993)	
	C66	Rebar, <i>et al.</i> , "Zinc Finger Phage: Affinity Selection of Fingers with New DNA-Binding Specificities," <i>Science</i> <u>263</u> :671-673 (1994)	
	C67	Ridout III, <i>et al.</i> , "Nuclear Cloning and Epigenetic Reprogramming of the Genome," <i>Science</i> <u>293</u> :1093-1098 (2001)	
	C68	Rouet, <i>et al.</i> , "Expression of a Site-Specific Endonuclease Stimulates Homologous Recombination in Mammalian Cells," <i>Proc. Natl. Acad. Sci. USA</i> <u>91</u> :6064-6068 (1994)	
	C69	Rouet, <i>et al.</i> , "Introduction of Double-Strand Breaks into the Genome of Mouse Cells by Expression of a Rare-Cutting Endonuclease," <i>Molecular and Cellular Biology</i> <u>14</u> (12):8096-8106 (1994)	

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	C70	Sanford, <i>et al.</i> , "An Improved, Helium-Driven Biolistic Device," <i>Tech.-A J. of Meth. In Cell and Mol. Biol.</i> 3:3-16 (1991)	
	C71	Sapranaukas, <i>et al.</i> , "Novel Subtype of Type IIs Restriction Enzymes: Bfii Endonuclease Exhibits Similarities to the Edta-resistant Nuclease nuc of <i>Salmonella Typhimurium</i> ," <i>J. Biol. Chem.</i> 275:30878-30885 (2000)	
	C72	Sargent, <i>et al.</i> , "Repair of Site-Specific Double-Strand Breaks in a Mammalian Chromosome by Homologous and Illegitimate Recombination," <i>Molecular and Cellular Biology</i> 17(1):267-277 (1997)	
	C73	Schnieke, <i>et al.</i> , "Human Factor IX Transgenic Sheep Produced by Transfer of Nuclei from Transfected Fetal Fibroblasts," <i>Science</i> 278:2130-2133 (1997)	
	C74	Sedivy, <i>et al.</i> , "Positive Genetic Selection for Gene Disruption in Mammalian Cells by Homologous Recombination," <i>Proc. Natl. Acad. Sci. USA</i> 86:227-231 (1989)	
	C75	Segal, <i>et al.</i> , "Endonuclease-Induced, Targeted Homologous Extrachromosomal Recombination in <i>Xenopus</i> Oocytes," <i>Proc. Natl. Acad. Sci. USA</i> 92:806-810 (1995)	
	C76	Segal, <i>et al.</i> , "Toward Controlling Gene Expression at Will: Selection and Design of Zinc Finger Domains Recognizing Each of the 5'-GNN-3' DNA Target Sequences," <i>Proc. Natl. Acad. Sci. USA</i> 96:2758-2763 (1999)	
	C77	Segal, D. J., "The Use of Zinc Finger Peptides to Study the Role of the Specific factor Binding Sites in the Chromatin Environment," <i>Methods</i> 26:76-83 (2002)	
	C78	Sera, <i>et al.</i> , "Rational Design of Artificial Zinc-Finger Proteins Using a Nondegenerate Recognition Code table," <i>Biochemistry</i> 41:7074-7081 (2002)	
	C79	Severin, <i>et al.</i> , "Heat-Inducible Hygromycin Resistance in Transgenic Tobacco," <i>Plant Mol. Biol.</i> 15:827-833 (1990)	
	C80	Shi, <i>et al.</i> , "Specific DNA-RNA Hybrid Binding by Zinc Finger Proteins," <i>Science</i> 268:282-284 (1995)	
	C81	Shin, <i>et al.</i> , "A Cat Cloned by Nuclear Transplantation," <i>Nature</i> 415:859 (2002)	
	C82	Shillito, <i>et al.</i> , "Protoplast Isolation and Transformation," <i>Plant Mol. Bio.-A Prac. App.</i> , Shaw, ed., IRL Press, pp. 161-186 (1988)	

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				Application Number	10/587,723
				Filing Date	February 3, 2005
				First Named Inventor	MILLER et al.
				Group Art Unit	
				Examiner Name	
Sheet	9	of	10	Attorney Docket Number	8325-0036.31 (S36-US3)

	C83	Smith, <i>et al.</i> , "Double Strand Breaks at the target Locus Stimulate Gene targeting in Embryonic Stem Cells," <i>Nuc. Acids Res.</i> <u>23</u> (24):5012-5019 (1995)	
	C84	Smith, <i>et al.</i> , "A Detailed Study of the Substrate Specificity of a Chimeric Restriction Enzyme," <i>Nuc. Acids Res.</i> <u>27</u> (2):674-681 (1999)	
	C85	Smith, <i>et al.</i> , "Requirements for Double-Strand Cleavage by Chimeric Restriction Enzymes with Zinc Finger DNA Recognition Domains," <i>Nuc. Acids Res.</i> <u>28</u> (17):3361-3369 (2000)	
	C86	Sternberg, <i>et al.</i> , "Bacteriophage P1 Site-Specific Recombination," <i>J. Mol. Biol.</i> <u>150</u> :467-507 (1981)	
	C87	Taghian, <i>et al.</i> , "Chromosomal Double-Strand Breaks Induce Gene Conversion at High Frequency in Mammalian Cells," <i>Mole. And Cell. Biol.</i> <u>17</u> (11):6386-6393 (1997)	
	C88	Takamatsu, <i>et al.</i> , "Expression of Bacterial Chloramphenicol Acetyltransferase Gene in Tobacco Plants Mediated by TMV-RNA," <i>EMBO J.</i> <u>6</u> :307-311 (1987)	
	C89	Takata, <i>et al.</i> , "Homologous Recombination and Non-Homologous End-Joining Pathways of DNA Double-Strand Break Repair Have Overlapping Roles in the Maintenance of Chromosomal Integrity in Vertebrate Cells," <i>EMBO J.</i> <u>17</u> :5497-5508 (1998)	
	C90	Thierry, <i>et al.</i> , "Cleavage of Yeast and Bacteriophage T& Genomes at a Single Site Using the Rare Cutter Endonuclease I-Sce I," <i>Nucleic Acids Res.</i> <u>19</u> :189-190 (1991)	
	C91	Velten, <i>et al.</i> , "Isolation of a Dual Plant Promoter Fragment from the Ti Plasmid of <i>Agrobacterium Tumefaciens</i> ," <i>EMBO J.</i> <u>3</u> :2723-2730 (1984)	
	C92	Verma, <i>et al.</i> , "Gene therapy—promises, problems and prospects," <i>Nature</i> <u>389</u> :239-242 (1997)	
	C93	Verma, <i>et al.</i> , "Gene Therapy: Twenty-First Century Medicine," <i>Annual Review of Biochemistry</i> <u>74</u> :711-738 (2005)	
	C94	Wah, <i>et al.</i> , "Structure of the Multimodular Endonuclease FokI Bound to DNA," <i>Nature</i> <u>388</u> :97-100 (1997)	
	C95	Wang, <i>et al.</i> , "Single-stranded Oligonucleotide-mediated Gene Repair in Mammalian Cells has a Mechanism Distinct from Homologous Recombination Repair," <i>Biochemical and Biophysical Research Communications</i> <u>350</u> :568-573 (2006)	

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	C96	Wilmut, <i>et al.</i> , "Viable Offspring Derived from Fetal and Adult Mammalian Cells," <i>Nature</i> <u>385</u> :810-813 (1997)	
	C97	Wilson, J. H., "Pointing Fingers at the Limiting Step in Gene targeting," <i>Nature Biotechnology</i> <u>21</u> (7):759-760 (2003)	
	C98	Wolfe, <i>et al.</i> , "Beyond the Recognition Code: Structures of Two Cys2His2 Zinc Finger/TATA Box Complexes," <i>Structure</i> <u>9</u> :727-723 (2001)	
	C99	Wolfe, <i>et al.</i> , "DNA Recognition by Cys2His2 Zinc Finger Proteins." <i>Annu. Rev. Biophys. Biomol. Struct.</i> <u>3</u> :183-212 (1999)	
	C100	Xu, et al., "Engineering a Nicking Endonuclease N. AlwI by Domain Swapping," <i>PNAS</i> <u>98</u> (23):12990-12995 (2001)	
	C101	Yanez, <i>et al.</i> , "Therapeutic Gene targeting," <i>Gene Therapy</i> <u>5</u> :149-159 (1998)	
	C102	Zuffrey, <i>et al.</i> , "Woodchuck Hepatitis Virus Posttranscriptional Regulatory Element Enhances Expression of Transgenes Delivered by Retroviral Vectors," <i>Journal of Virology</i> <u>73</u> (4): 2886-2892 (1999)	

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